Release notes for ENDF/B Development n-037_Rb_087 evaluation



April 26, 2017

- checkr Warnings:
 - 1. A previous error halted parsing of the current section MAT=3731, MF=1, MT=451 (1): Parsing stopped

ERROR(S) FOUND IN MAT=3731, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 243 TO 286

- checkr Errors:
 - 1. A variable is outside the allowed ENDF range MAT=3731, MF=1, MT=451 (0): Variable range

ERROR(S) FOUND IN MAT=3731, MF= 1, MT=451
MOD = 1 OUT OF RANGE 0 - 0 RECORD NUMBER 243

2. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=2, MT=151 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 288

3. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=1 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY RECORD NUMBER 463

4. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 2

SECTION 3/ 2 NOT IN DIRECTORY RECORD NUMBER 489

5. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=4 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY RECORD NUMBER 515

6. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY RECORD NUMBER 530

7. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 17 SECTION 3/ 17 NOT IN DIRECTORY

RECORD NUMBER 540

8. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 22 SECTION 3/ 22 NOT IN DIRECTORY

RECORD NUMBER 545

9. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 28 SECTION 3/ 28 NOT IN DIRECTORY

RECORD NUMBER 557

10. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 32 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 32 SECTION 3/ 32 NOT IN DIRECTORY

RECORD NUMBER 568

11. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 51 SECTION 3/ 51 NOT IN DIRECTORY

RECORD NUMBER 575

12. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 52 SECTION 3/ 52 NOT IN DIRECTORY

RECORD NUMBER 590

13. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=53 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 53 SECTION 3/ 53 NOT IN DIRECTORY

RECORD NUMBER 603

14. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=54 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 54 SECTION 3/ 54 NOT IN DIRECTORY

RECORD NUMBER 615

15. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=55 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 55 SECTION 3/ 55 NOT IN DIRECTORY

RECORD NUMBER 626

16. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 56 SECTION 3/ 56 NOT IN DIRECTORY

RECORD NUMBER 637

17. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 57 SECTION 3/ 57 NOT IN DIRECTORY

RECORD NUMBER 647

18. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT= 91 SECTION 3/ 91 NOT IN DIRECTORY

RECORD NUMBER 657

19. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 3, MT = 102 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT=102 SECTION 3/102 NOT IN DIRECTORY

RECORD NUMBER 666

20. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=103 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT=103 SECTION 3/103 NOT IN DIRECTORY

RECORD NUMBER 686

21. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=104 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT=104 SECTION 3/104 NOT IN DIRECTORY

RECORD NUMBER 700

22. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=105 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT=105 SECTION 3/105 NOT IN DIRECTORY

RECORD NUMBER 713

23. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=3, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 3, MT=107 SECTION 3/107 NOT IN DIRECTORY

RECORD NUMBER 723

24. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 4, MT = 2 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 2 SECTION 4/ 2 NOT IN DIRECTORY

RECORD NUMBER 739

25. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 16 SECTION 4/ 16 NOT IN DIRECTORY

RECORD NUMBER 899

26. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 4, MT = 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 17 SECTION 4/ 17 NOT IN DIRECTORY

RECORD NUMBER 910

27. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 22 SECTION 4/ 22 NOT IN DIRECTORY

RECORD NUMBER 921

28. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 28

SECTION 4/ 28 NOT IN DIRECTORY

RECORD NUMBER 932

29. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=32 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 32

SECTION 4/ 32 NOT IN DIRECTORY

RECORD NUMBER 943

30. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 51 SECTION 4/ 51 NOT IN DIRECTORY

RECORD NUMBER 954

31. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 52 SECTION 4/ 52 NOT IN DIRECTORY

RECORD NUMBER 979

32. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 4, MT = 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 53 SECTION 4/ 53 NOT IN DIRECTORY

RECORD NUMBER 1004

33. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=54 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 54 SECTION 4/ 54 NOT IN DIRECTORY

RECORD NUMBER 1027

34. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=55 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 55 SECTION 4/ 55 NOT IN DIRECTORY

RECORD NUMBER 1050

35. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=56 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 56 SECTION 4/ 56 NOT IN DIRECTORY

RECORD NUMBER 1073

36. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=57 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 57 SECTION 4/ 57 NOT IN DIRECTORY

RECORD NUMBER 1096

37. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=4, MT=91 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 4, MT= 91 SECTION 4/ 91 NOT IN DIRECTORY

RECORD NUMBER 1119

38. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=5, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 16 SECTION 5/ 16 NOT IN DIRECTORY

RECORD NUMBER 1143

39. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=5, MT=17 (0): Directory (b)

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ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 17
SECTION 5/ 17 NOT IN DIRECTORY
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RECORD NUMBER 1187

40. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 3731, MF = 5, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 22 SECTION 5/ 22 NOT IN DIRECTORY

RECORD NUMBER 1203

41. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=5, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 28 SECTION 5/ 28 NOT IN DIRECTORY

RECORD NUMBER 1309

42. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=5, MT=32 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 32 SECTION 5/ 32 NOT IN DIRECTORY

RECORD NUMBER 1393

43. Missing a section in directory so your directory is messed up. This error will break everything else MAT=3731, MF=5, MT=91 (0): Directory (b)

ERROR(S) FOUND IN MAT=3731, MF= 5, MT= 91 SECTION 5/ 91 NOT IN DIRECTORY

RECORD NUMBER 1421

- psyche Warnings:
 - 1. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ISOTOPE MASS = 87. L=0 / STRENGTH FUNCTION IS 1.97253E-04 / STRENGTH FUNCTION 1.97253E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ISOTOPE MASS = 87. L = 0

STRENGTH FUNCTION IS 1.97253E-04

STRENGTH FUNCTION 1.97253E-04

- ... [1 more lines]
- 2. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ISOTOPE MASS = 87. L = 1 / STRENGTH FUNCTION IS 4.56816E-05 / STRENGTH FUNCTION 4.56816E-05 / LIES OUTSIDE LIMITS 1.00000E-04 TO 8.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ISOTOPE MASS = 87. L = 1

STRENGTH FUNCTION IS 4.56816E-05

STRENGTH FUNCTION 4.56816E-05

... [1 more lines]

3. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 / STRENGTH FUNCTION 1.60005E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 STRENGTH FUNCTION 1.60005E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [3 more lines]

4. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 / STRENGTH FUNCTION 1.59995E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 STRENGTH FUNCTION 1.59995E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [1 more lines]

5. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 / STRENGTH FUNCTION 1.59998E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 STRENGTH FUNCTION 1.59998E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

6. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 / STRENGTH FUNCTION 1.60003E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 STRENGTH FUNCTION 1.60003E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [1 more lines]

7. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04 / STRENGTH FUNCTION 1.59999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60005E-04

STRENGTH FUNCTION 1.59999E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

8. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 / STRENGTH FUNCTION 1.60002E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 STRENGTH FUNCTION 1.60002E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [3 more lines]

9. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 / STRENGTH FUNCTION 1.59999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 STRENGTH FUNCTION 1.59999E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [1 more lines]

10. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 / STRENGTH FUNCTION 1.60001E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 STRENGTH FUNCTION 1.60001E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

... [1 more lines]

11. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 / STRENGTH FUNCTION 1.60000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2

SECTION 151

ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 STRENGTH FUNCTION 1.60000E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04

12. Strength function in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.24600E+04. STRENGTH FUNCTION IS 1.60002E-04 / STRENGTH FUNCTION 1.59997E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

- recent Warnings:
 - 1. Statistical weight of certain L values were incorrect 0: RRR goof (a)

- fudge-4.0 Warnings:
 - 1. Missing a channel with a particular angular momenta combination resonances / resolved (Error # 1): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L=0, J=0.0 and S=0.0 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=0.0 and S=1.0 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=1.0 and S=0.0 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=1.0 and S=1.0 for "capture" ... plus 2 more instances of this message
```

2. Cross section does not match sum of linked reaction cross sections $crossSectionSum\ label\ \theta\colon\ total\ (Error\ \#\ \theta)\colon\ CS\ Sum.$

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.17%

- fudge-4.0 Errors:
 - 1. The spin statistical weights are off, indicating missing channels resonances / resolved / MultiLevel_BreitWigner (Error # 0): badSpinStatisticalWeights

WARNING: The spin statical weights for L=1 sums to 1.5, but should sum to 3.0. You have too few channels for re

2. Calculated and tabulated Q values disagree. reaction label 9: n[multiplicity:'2'] + Rb86 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9911716.849319458 eV vs -9934090. eV!

3. Calculated and tabulated Q values disagree. reaction label 10: n[multiplicity:'3'] + Rb85 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -18562719.79112244 eV vs -1.85891e7 eV!

4. Calculated and tabulated Q values disagree. reaction label 11: n + H1 + Kr86 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8610816.789520264 eV vs -8626330. eV!

5. Calculated and tabulated Q values disagree. reaction label 12: n + H2 + Kr85 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -16242871.47149658 eV vs -1.61835e7 eV!

6. Calculated and tabulated Q values disagree.

reaction label 13: Rb88 + qamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6092899.468170166 eV vs 6077690. eV!

7. Calculated and tabulated Q values disagree. reaction label 14: n + He4 + Br83 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8003402.636932373 eV vs -7992580. eV!

8. Calculated and tabulated Q values disagree. reaction label 15: H1 + Kr87_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -3095642.913711548 eV vs -3106240. eV!

9. Calculated and tabulated Q values disagree. reaction label 16: H2 + Kr86-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6386250.688583374 eV vs -6316210. eV!

10. Calculated and tabulated Q values disagree. reaction label 17: $H3 + Kr85_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9985638.530883789 eV vs -9998360. eV!

11. Calculated and tabulated Q values disagree. reaction label 18: He4 + Br84-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -1141679.596664429 eV vs -1182480. eV!

• njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 16 only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 17 only mf4/mf5 provided

- 3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 22 only mf4/mf5 provided
- 4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
 - groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 28 only mf4/mf5 provided
- 5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 32 only mf4/mf5 provided
- 6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

 groupr...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)
 - ---message from conver---cannot do complete particle production for mt= 91 only mf4/mf5 provided